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ABSTRACT

A study investigated the effectiveness of the "News Read" project in which reading was taught using an analytic procedure (where understanding is a prerequisite for correct decoding) using newspapers as the sole reading materials. Subjects, about 300 students in three classes from each of the three levels of Swedish comprehensive schools (grades one through three, four through six, and seven through nine), learned how to read and developed their reading skills over a two-year period by making use of a daily supply of three of Stockholm's major newspapers as their only reading texts. Results from the experimental group were compared to the results from 7,515 pupils in grades one through nine who had received analytic reading instruction but who used conventional reading materials. Results indicated that: (1) the newspaper group underwent a better and faster development so that by the end of the study's second year, the second grade subjects were reading at a level 2 to 2.5 years above grade level; (2) students demonstrated a genuine interest in reading; (3) most medium and some poor readers mustered a good enough preunderstanding to allow for the genesis of an inner dialogue between the reading child and his/her own reactions to the text; (4) subjects divided their time between skimming and reading in-depth; (5) younger children showed a faster reading development than did older children who seemed hampered by their earlier training in the conventional methods of being taught to read; (6) at no level did the main results appear until teachers understood the real essence of the program; (7) subjects increased their spelling ability and wrote better essays; and (8) parents demonstrated new and genuine interest in their children's schoolwork. (One figure and five tables of data are included.) (RS)

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TEACHING ANALYTICAL READING

WITH NEWSPAPERS AS SOLE

READING TEXT

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TEACHING ANALYTICAL READING WITH NEWSPAPERS AS SOLE READING TEXTS

Introduction

During the early eighties a task group was formed consisting of research scientists from the Institute of Education at Stockholm University, and of representatives of a branch of the Swedish Newspapers' Association that is concerned with promoting the use of newspapers as a teaching medium in schools (Tidningen i Skolan). The object of the group was to discuss ways and means for undertaking an educational joint venture involving an experiment in teaching children to read in which traditional reading books and supplementary readers would be replaced by newspapers as the sole source of reading material. All three levels of the Swedish compulsory school (the lower, middle and upper grades) were to be included in the experiment, and as the experiment progressed, newspapers would subsequently even replace ordinary texts from different school subjects.

In the traditional school world where teaching children to read has always been looked upon as being the task of the teachers of the lower grades, the idea of a reading instruction experiment that would encompass the whole of the compulsory school is a challenge in itself. If to this we add the substitution of newspapers for the most cherished - both by teachers and schoolbook publishers - educational vehiculi of them all, i.e. the readers, then one can well appreciate that this project was looked upon in many quarters with some degree of scepticism. Thus we had considerable difficulty in

finding local school authorities in the Greater Stockholm area who were willing to open their schools for the planned three-year project. For one thing, this meant that it was not possible to select teachers for the experiment who had already been trained in the analytical method of teaching children to read and/or who were able to make more extensive use of newspapers as the teaching medium. For another, it meant that we did not know which four community schools nor which classes would be taking part in the project until some three weeks before the start of the first experimental schoolyear. The highly positive outcome of the project as a whole should be evaluated against this rather unfavorable beginning.

The experimental teaching proper was carried out during the consecutive schoolyears of 1985-1986 and 1986-1987, whereupon the following schoolyear of 1987-1988 was devoted to evaluation and report. Three classes from each of the three levels of the comprehensive school took part in the experiment. Thus some 300 children in all, from grades 1-3, 4-6 and 7-9, i.e. children aged 7-9, 10-12 and 13-15 respectively, learned how to read and developed their reading skills by making use of a daily supply of three of Stockholm's major newspapers (5 copies of each newspaper per class) as principally their only reading texts.

According to the original plan of the project, the results from the experiment classes were to be tested against the results from a corresponding control group. Since neither the experiment group nor the control group included more than about 300 pupils each, this of course was not the most preferable result-testing procedure, but it was all our low-budget project could afford. Later, additional budget allowances made it possible for us to compare the outcome in the experimental teaching classes with the corresponding teaching of reading results from 7,515 pupils in grades 1 to 9 who had received the same kind of reading instruction, i.e. in accordance with the analytical method, but who had used conventional readers and other supplementary schoolbooks as

their reading texts.

Scientific basis for the TIDLUS (NEWSpaper READING) project

It was pointed out in the introduction that the NEWSREAD project was based on an analytic theory of the reading process. A few words should be said to differentiate between this theory and the competing synthetic theory. The latter theory provides the theoretical basis for the conventional teaching of reading in which drill practice in phonics is the standard starting procedure. Both theoretical lines of thought were introduced into the school world towards the end of the nineteenth century. The synthetic theory grew out of a British research tradition concerned with reading disabilities. The analytic theory developed from the work of the American educational psychologist, Edmund B. Huey (1870-1920), who took his starting point from the teachings of the experimental psychology pioneers, the German Wilhelm Wundth (1832-1920) and the American William James (1842-1910).

Most of us have been taught to read by means of the synthetic method in which phonics is the starting point. The ability to decode written signs is taught as the first step - first each sign by itself and then combined in pairs or in syllables. Only when the decoding process has been learned, partly or fully, are the pupils encouraged to become engaged in the content of the words they read.

This amounts to having to learn a totally new, artificial language, which only later - and in the case of many children, very laboriously so - is transferred to the understanding of texts in the reader's own mother tongue. Thus, when a child is first confronted with the task of learning to read, it is prevented from using in the decoding task its only existing, genuine support, viz. the linguistic automaticity which through structural learning was established during the child's first years of life, i.e. when

it was occupied fulltime in learning its mother tongue.

Whenever we speak, it is this linguistic automaticity which controls our pronunciation and prosody, as well as our lexical (semantic) and syntactic structuring of phrases, propositions and longer contextual units. But the same linguistic automaticity also controls a listener's unconscious creative activity towards communicative understanding, i.e. the listener's interpretation.

Furthermore, it is the same linguistic automaticity which controls our unconscious choice of words and phrases whether we write a short message or a more extensive text. And finally, it is this unconscious ability which renders it possible for us as readers to get the gist of any written material in our mother tongue.

Now let us look at a very simplistic model of communication processes in general.

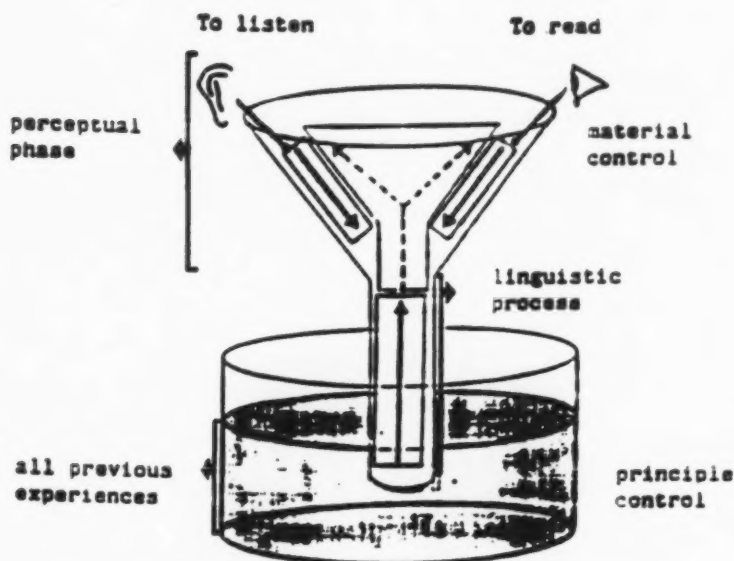


Fig. 1

Let us - as in fig. 1 - look upon the individual as a funnel, the wider top of which symbolizes the perceptual phase of all acts of communication, the shank being the individual's thought process proper and the bowl below suggesting the existence of all earlier experiences in the long-term memory. From accumulated psychological research into the biological correlates to learning, recognizing, interpreting and understanding, we know today - as did the American educational psychologist, Edmund B. Huey, already at the turn of the century - that although the incoming material becomes a part of the controlling activity during communicative processes, it is the accumulated experiences of the speaking or listening, writing or reading individual which is of the utmost importance during these processes.

From this figure we are thus able to deduce a general law for all communicative activities. This Homo Communicans law reads:

All communicative effects depend on the receiver's qualifications to interpret (=understand) and use (=act upon) the message, viz. on his or her accumulated earlier experiences.

This law is also basic to the analytic process model for reading and for learning how to read. In the analytic reading model a natural or especially evoked preunderstanding exists before the decoding and thus controls the very process of decoding, just as depicted in the funnel figure above. But this means that one must never read nor - even more importantly - engage in learning to read activities without a proper preunderstanding of the text to be read as well as a real interest in the content of this same text. This implies that in analytic reading one must always maintain the communicative nature of the reading process. kBut how on earth does one manage to do that if one is using the miserably watered down texts of ordinary readers?

Such was my predicament when - in the task group - I met with

representatives of the Stockholm group from the daily newspapers. During our talks I realized that the solution to my problems was to use daily newspapers as reading texts instead of the ordinary readers' and supplementary texts on different subjects.

The basic difference between the two competing methods for the teaching of reading is thus the following. In the synthetic method, "breaking the code" is the key ability. The written text is treated as if it were a brand new language to be learned and thus the decoding procedure has to be drilled into overlearning before any questions about the meaningful content of the decoded words and/or phrases may be raised at all.

In the analytic method for the teaching of reading, on the other hand, one makes optimal use of the linguistic automaticity established by structural learning within the process of acquiring one's mother tongue¹. This means that reading is rightly treated as a communicative process, which in turn means that there always exists a message prior to any decoding and that the pupil's willingness, yes even urge, to grasp its gist, together with the mobilization of all possibly pertinent earlier knowledge and experiences should always precede and thus control the decoding efforts. In summary then

synthetic procedure: decoding precedes understanding, and rightly so, since it is the prerequisite for the genesis of our understanding of the text;

analytic procedure: understanding - at least in the form of preunderstanding - is the prerequisite for correct decoding and must thus precede it, even in learning how to read.

¹. This is the linguistic developmental fact, behind Mary-Anne Hall's and other authors' intuitive writings about learning to read "on speech basis"; cf e.g. Hall (1976), Teaching Reading as a Language Experience; Columbus, Ohio.

As a consequence of this basic difference, there are strictly speaking no demands whatsoever on the kinds of texts to be used in synthetic reading. Of course, it is nice if the texts are interesting, but since the children's decoding efforts always kill their genuine interest in any text content, it does not really matter. In analytic reading on the other hand, the necessary reading in depth, i.e. with the reader's controlling inner dialogue and preparatory text understanding running well ahead of and controlling the decoding procedure, it is a must that there are enough texts to choose from to allow every pupil to pick his or her own reading texts according to his or her genuine interests as to subject matter. This demand is impossible to meet with a plausible number of specifically produced schoolbooks. Thus we find that only the continuously produced daily newspapers can provide such a wide variety of texts at a reasonable cost. Therefore, one of the most lucrative specialities of the schoolbook publishing companies has lost its *raison d'être*. It was indeed this demand for an unlimited amount of text material in all possible subject areas which brought together the above mentioned task group.

Project procedure

Teachers' training

The teachers from all of the nine experimental classes consented to an introductory training course during the week preceding the fall semester of 1965. The course proved, however, to be both insufficient and inadequate for the student teachers to attain the two-fold goal, which was to obtain working knowledge of analytic teaching of reading as well as of methods to make use of newspapers as a teaching medium. This fact called for a reallocation of project funds to allow for a continuation course arranged as in-service

seminars on project methodology throughout the whole experimental period.

The obvious outcome of these seminars will be commented on in the discussion section of this report. As only one of our nine teachers had ever taken a course of a related nature prior to her engagement in the project, and only one other had gathered any information whatsoever about this approach to the teaching of reading, the training task at hand was overwhelming. Not until the end of the first experimental year did a majority of our teachers show that not only did they know how to perform according to the models of analytic teaching of reading and of using newspapers as a teaching medium, but also that they understood the underlying ideas to such a degree that they could make thier own diagnoses concerning the teaching problems at hand and decide on their own what to do to bring about problem solutions. As we will see later, during this phase in the individual teacher's professional development, the pupils' reading development increased in a most promising way.

Classroom procedures in the lower grades

At the beginning of the project period, there were in the lower grades - as well as in the middle and upper grades - considerable differences between the individual teachers' use of newspaper texts in their classroom work. Gradually these differences decreased, but all other kinds of text material were discarded in only one of the three classrooms in the lower grades.

The most general innovation in the three lower grades, however, was that when newspaper texts were substituted for the more structured readers and supplementary books, the teachers' own controlling contributions to the total educational process were substantially increased.

The children's production of their own reading texts was more often than not based on newspaper cuttings. To cut out and tape together figures, letters, particular words and whole sentences was the basic activity in this respect. Towards the end of the experimental teaching period, the newspaper material seems to have replaced all other kinds of texts as starting points in speech and writing exercises.

There is also a general opinion among the teachers that in the children's conversations with their parents and with other adults outside the classroom, the topics are significantly often taken from the childrens' newspaper reading in general. This realization led the teachers to reduce their control over which text material the pupils were allowed to choose for their classroom reading. At the end of the project period the pupils' right of self-determination in this respect was a very conscious part of the teachers' developmental strategy, even for these young pupils, and obviously it became a very strong ingredient in the pupils' increasing ability to take an interest in and responsibility for their own reading development.

As a conclusion we found that all three lower grade teachers agreed upon this as being the perfect method to bring about meaningful individualized schoolwork without using any didactic tricks of the trade or other crafty artifices. On a more generalized level, this has led not only to good individual or group achievement, but also to an increased capacity for listening to and respecting the opinions of others, and also for acknowledging good performances by others. Finally, the pupils' meta-linguistic understanding and capability have become more highly developed.

Classroom procedures in the middle grades

To start with, in the middle grades, too, there is a rather wide variation among the three experimental classes. Criticism of conventional textbooks and supplementary books, however, is unanimously strong at this level: the books "are deficient as such, with poor examination problems and generally on an inferior level of abstraction", or they "give scanty knowledge within their compressed textblocks overburdened with facts".

These teachers were accordingly rather keen on using the newspaper material in order to fulfill the demands of the curriculum which urges them to promote "independent and good citizens, with a thirst for knowledge", while the ordinary schoolbooks only succeed in providing insufficient and piecemeal data. On the other hand, the middle grades teachers did not seem able to realize what kind of effort on their part was needed in order to promote reading development in individual pupils.

Irrespective of how experienced they were as middle grades teachers, they failed to see any dividing lines other than the ones between good, medium and poor readers according to normal grade-level expectancy. Thus the only known grading criteria seemed to be conventional oral reading and silent reading (paragraph reading) tests with or without a time control.

Thus the newspaper reading situation gave these teachers a first idea about the fact that good readers have something that poor readers do not have, viz. functionally different approaches both to different texts and to different reading tasks in connection with a specific text. As soon as this realization had arisen out of the teachers' understanding of the analytic theory of reading, the middle grades pupils showed an accelerating increase in their reading development. This tendency is - if possible - even more striking when we

turn our attention to the changes in reading development which are noticeable in the pupils of the upper grades.

In a way one could say that in the end the middle grades pupils surpassed their teachers in finding ways to practice their reading and thereby increasing their own individual reading development, once they were freed from the restrictions which their earlier three years of synthetic reading instruction had put upon them.

Classroom procedures in the upper grades

As a rule, on the upper level of the comprehensive school actual reading instruction is non-existent. Worrying about their pupils' reading ability does not constitute a part of the upper level teachers' duties. Instead teachers try to provide the pupils with texts from Swedish literature which fit the individual reader's ability in different respects - among which, of course, is the pupil's reading ability.

But as the teachers began to make use of the packages of newspapers they received every day in their reading exercises, parallel with the usual literature they used in reading, they realized that some pupils were functionally more able than others to differentiate their reading according to a given task, but also according to the different demands of the various texts.

From this starting point, but also acting on experiences from the specific reading ability testing procedure which goes with our analytic reading instruction (LUS = Reading Developmental Scheme, RDS), even on this level the upper grades teachers increased their use of newspaper texts in order to promote individual reading development. But their systematic use of newspaper material opened up also quite new

ways of teaching pupils generally how to learn. This broadening of the task of reading to include a general task of forming new knowledge seems to be much more feasible if newspaper material is used, since e.g. so-called careless reading, which is normally completely forbidden in school, already exists in newspaper reading as skimming. Two good examples of this latter concept are skimming as preparatory to subsequent reading in depth, and survey-reading in which the reader alternately skims a text and reads selected parts of it more carefully.

The possibility to assign differentiated reading tasks to pupils on individual levels of reading development successively increased the teachers' interest in preparing newspaper material exercises throughout the project period.

RESULTS

By way of introduction, it should first be pointed out that all results from this project are presented in accordance with the numbered 23 qualitative steps on the RDS (LUS)-scale.

This scale is the result of generalizations from extensive empirical material collected from all levels of the Swedish education system during the sixties and seventies.

The intervening squares and ovals stand for two different kinds of mental stages which are only of intervening quality as far as a child's reading development is concerned.

Obviously, we should expect to find the most dramatic qualitative changes resulting from the experimental teaching of reading among the pupils in the lower level of the comprehensive school. Just as undoubtedly it is in the middle level grades that such changes are less likely to occur. This is very probably because it is the middle grades pupils who are most hampered by their earlier three years of synthetic reading. Although upper grades pupils have been subjected to the synthetic teaching of reading for twice as many years as the middle grades pupils, they are less restricted in their attitudes towards reading. They can arrive more easily at an understanding of reading as a communicative process and are thus able to change their attitudes towards reading as a school subject and accordingly their actual reading behaviour as well. Qualitatively, their increase in reading development is thus of the same astonishing degree as that which we found among the youngest pupils.

Table 1.

Grade	Semester	Month for testing	Mode, experimental group	Mode, control group
1	Fall 85	November	7	5
1	Spring 86	April	11	11, 13
2	Fall 86	November	13-14	13, 15
2	Spring 87	June	16	15

Table 2.

Grade	Semester	Month for testing	Mode, experimental group	Mode, control group
4	Fall 85	November	13, 15	18
4	Spring 86	April	13, 15-17	20
5	Fall 86	November	15, 17-19	18-19
5	Spring 87	June	18	18

Table 3.

Grade	Semester	Month for testing	Mode, experimental group	Mode, control group
7	Fall 85	November	17-18	18
7	Spring 86	April	18	18-19
8	Fall 86	November	20	18
8	Spring 87	April	20	18

If we start our discussion of the quantitative results by looking at the mode as the central tendency in our grade by grade distributions, it may seem that the results are very

much the same in the experiment group and the control group. But by scrutinizing the results, we find some important differences between the two materials.

The newspaper group undergoes a better and faster development from the very beginning - which is obvious also in the rapid change of the mode. Yet in the goodness-of-fit testing between the two materials, we were able to show ($p < 0.001$) that the samples were not drawn from the same population. This is due to the fact that in November 1985 the experiment (newspaper) group pupils were non-existent or greatly underrepresented at the five lowest steps of the (LUS-) RDS-scale, but were overly represented at the subsequent three steps, i.e. RDS-steps 6-8.

Of these, step 6 is closely method-dependent, while reaching steps 7 and 8 is a sign of increasing meta-linguistic understanding, i.e. that the experimental (newspaper) group pupils have reached a more general linguistic development than the control group. As we will soon see, the same strong tendency still prevails at the end of the first schoolyear. A corresponding goodness-of-fit test about half a year later, in April 1986, rendered the same outcome ($p < 0.001$), at that time due to the fact that the experimental pupils were non-existent or greatly underrepresented at RDS-steps 1-7 but overrepresented at RDS-steps 8-11. As has already been said, RDS-step 8 is clearly a sign of meta-linguistic development and as such is a result of the analytic teaching of reading. We might call it a receipt from the child on its understanding of reading as a communicative activity, an understanding which is utilized and further deepened at steps 9-11. In overall time difference between the materials, our results equal about half a schoolyear.

During the second schoolyear this tendency grows even stronger, as can be seen from table 4. In June 1987 more than

half of the experiment (newspaper) pupils in grade two have reached step 16 or further, while in the grade two control group ($n = 702$) only a third of the pupils have managed step 16 or further. As step 16 has been proven to be a crucial point in reading development and one which requires quite a lot of work to negotiate, it must indeed be considered as a conservative estimate to say that in overall time difference this developmental gap in reading ability equals a whole schoolyear. This is one of the most significant differences between the newspaper-based and the schoolbook-based teaching of reading, in favor of newspaper material as the teaching medium.

In my mind there is no doubt whatsoever that this difference, primarily in handling the reading material in a functionally correct manner, is due to what these young pupils themselves have brought into their learning-how-to-read situation at school from their normal newspaper reading situations at home.

Table 4.

Grade	Semester	Month for testing	Obtained level of reading development in % of pupils		
			Under 16	16	Over 16
2	Spring 87	June	48	29	23
4	Fall 85	November	66	12	22
4	Spring 86	April	48	13	39
5	Fall 86	November	45	11	44
5	Spring 87	June	28	7	65
control group:					
2	Spring 87	June	65	9	26

Before we go on to discuss the results for the pupils of the middle and upper grades, it might be elucidative to compare the grade two results with the ones obtained from the middle grades pupils, as shown in table 4. Here we find that it is not until the end of the fall semester in grade five

(november 1986) that the middle grades children obtain about the same level of reading development as the grade two experimental group and only at the end of the spring semester in grade five (June 1987) is there a substantial difference in favor of the older children.

From this we gather once more, how important it is that the analytic teaching of reading is applied from the very beginning of a child's schoolwork. The differences between the experiment (newspaper) group and the control group is emphasized once again in table 4, especially if we use "at RDS-step 16 or above" as an operational definition of the optimal outcome from the first two years of reading instruction at school.

Now let us start our discussion of the results obtained from the middle and upper grades by looking at tables 2 and 3. Table 2 substantiates the experiment group teachers' statements that the average performance of all three project classes was exceptionally low at first, but that the pupils were indeed recovering in reading and writing in a most satisfactory way.

Another general trend from these two tables is that while the control group pupils at both school levels seem more or less to have come to a standstill in their reading development, the experiment pupils are undergoing a slow but steady increase which shows a successive stepping up tendency, too. As you can see, RDS-step 18 keeps appearing as the mode in seven different testings out of eight in the control material. Since this step is defined by a reading ability which is very often used as a common sense definition of a very good reader, it is no wonder that it is hard to surpass it using conventional schoolbooks as reading material.

The specific newspaper reading situation seems to add the needed momentum to reading development so that the pupils are able to attain the functionally important steps 19 and 20. From here it is only a step of practice (RDS-step 21) to keep

a developing reader from "the open end of individual reading development", i.e. the RDS-steps 22 and 23.

Table 5.

Grade	Semester	Month of testing	Obtained level of reading development in % of pupils					
			Under 18		18		Over 18	
			exp.	contr.	exp.	contr.	exp.	contr.
7	Fall 85	November	39	30	42	42	19	28
7	Spring 86	April	16	39	58	28	26	33
8	Fall 86	November	10	39	25	51	65	10

From table 5 it is indeed obvious that this progression goes on undisturbed in the experimental group. Look at the monotonously decreasing percentages in the "under 18" column: 39, 16, 10 and 5 as compared with the corresponding control group figures: 30, 39, 39 and 34. The "at 18" column is almost as monotonous: 42, 58, 25 and 17 as compared with the corresponding control group figures: 42, 28, 51, 38. Finally, the figures in the "over 18" column are again totally monotonous, but now of course increasing: 19, 26, 65 and 78 as compared with the corresponding figures from the control group: 28, 33, 10 and 28. A more steady and more easily interpretable indication of the superiority of newspapers to conventional schoolbooks in the teaching of reading seems impossible to find. Since the control material as well as synthetically taught pupils seem to become totally blocked in their reading development at this point, this difference is absolute and thus cannot be merely translated into time losses. It ought to be noted that in this respect approximately the same tendency has also been found in the material from the middle grades.

Although we are not able to report on any direct comparisons between the experiment group results and results from synthetically taught pupils, it is still possible to construct

such a comparison between our grade two pupils and the pupils who took part in our experimental learning project beginning in grade four. As has already been stated in comments to table 4, it is only at the end of the fall semester in grade five that those pupils who were initially synthetically taught reach the same ability level as our grade two pupils show at the end of the spring semester. The constructed overall time difference between these two materials are thus two, to two and a half, schoolyears. This and the empirical findings from the comparisons between our experiment and control groups are the main reasons why I have repeatedly stated that the outcome of this project is the most stunning I have come across during my 40 years as an experimentally oriented educational psychologist.

Concluding remarks

There may be many reasons why we obtained such surprisingly positive results. Here I mention only the most likely ones, taking them point by point.

- * The analytic reading process is basically a communication process. Thus it calls for texts which have been written basically for communicative purposes, texts like newspapers.

- * Every day at school the children in the experiment classes could find texts that were specifically interesting to them in at least one of the three newspapers with which they were supplied. In point of fact, most of the children found daily more than one item of special interest to them and when the experiment period came to an end, many pupils could show scrapbooks filled with articles, which they really wanted to read as soon as they had time to do so.

* Thanks to this genuine interest in the reading material, even most medium and some poor readers could muster a good enough preunderstanding to allow for the genesis of an inner dialogue between the reading child and its own reactions to the text. The appearance of this inner dialogue marks a first crucial step towards superior reading ability.

* Since skimming is a spontaneously learned way of using a newspaper when pressed for time, the individual seems more inclined to divide his or her normal reading activity in school into two kinds: the fast, preparatory type of reading, i.e. skimming; and the slower, dialogue-type of reading in depth. This division is, in turn, of significance for the qualitative leap in an individual's reading development that occurs midway in the process.

* The younger children who learned to read within the scope of this study showed a faster reading development than did the older children, who seemed hampered by their earlier training in the conventional methods of being taught to read. It was not until the second semester in grade five that the middle group surpassed the youngest group, who were then in grade two.

* At no level did the main results appear until the participating teachers had relinquished their initial ad hoc view of the method used and had come to understand its real essence. It was then that they found themselves able to deduce from their own theoretical knowledge how to handle everyday reading problems within the scope of their teaching responsibilities. It is thus a must to set aside enough resources to give the teachers continuous in-service training, until they reach such a mature understanding of what they are doing.

The points outlined above are the primary reasons why the NEWS-READ project led to such tremendously good results. In addition to these, there are a number of subsidiary results, some of which were rather unexpected:

- the children's generally increased inclination to read,
- their increased capability to create for themselves new knowledge of their own,
- their better spelling ability,
- their improved ability to write essays, and
- the parents' new and genuine interest in their children's schoolwork.